COUNTY OF LOS ANGELES

FIRE DEPARTMENT

1320 NORTH EASTERN AVENUE
LOS ANGELES, CALIFORNIA 90063-3294
(323) 881-6180

DARYL L. OSBY
FIRE CHIEF
FORESTER & FIRE WARDEN

November 26, 2012

TO: EACH SUPERVISOR

FROM: DARYL L. OSBY, FIRE CHIEF

BOARD MOTION 12-5027 - RESPONSE

This is an overview of the current dispatch practices, with emphasis placed on mutual aid (MA) and automatic aid (AA).

The Los Angeles County Fire Department (LAC) uses a computer aided dispatch (CAD) system designed by Northrup Grumman to manage all fire resources. When an emergency call is dispatched, available resources are recommended by the CAD system. CAD makes the recommendations for dispatching units by the Fire Station Order (FSO). The FSO is a sequenced and pre-programmed list of fire stations. The stations are listed in order of closest resource to the identified address. The outside agency's units identified in the AA agreement are part of the CAD recommendation in the event the jurisdictional LAC unit(s) is/are unavailable, or if the outside agency's unit is determined to be the closest.

The dispatch process begins at the call taker position. The call taker receives a 911 phone call and determines the location and type of emergency. Based upon the location of the emergency and the pre-defined FSO, CAD provides the dispatch position operator with a recommendation of units.

If an outside agency is part of the recommendation, a dispatcher contacts the outside agency (contact is made via telephone which is the most efficient manner at this time) to request the identified unit, and to confirm the unit is responding.

An AA agreement exists in some form between LAC, and every municipal fire department that shares a response border. These agreements are unique to each agency; they include resources for various call types, from a single engine for structure fires, to emergency medical responses, or any combination thereof. There are approximately 34 unique agreements in place today. The CAD is programmed to identify AA units, and will recommend those units according to their position priority in the FSO.

MA agreements are covered under the State of California "Mutual Aid Plan" to which all fire agencies are party. MA provides fire agencies the ability to assist one another as needed, and as available. At no time does MA require assistance to be rendered if it is deemed detrimental to an agency, by depleting their resources to the point of compromising the agency's coverage needs.

Located throughout LAC's jurisdiction are "critical coverage" fire stations or those which are deemed to be in need of critical coverage anytime the units regularly assigned to these fire stations are committed to incidents or training exercises for periods greater than 30 minutes in duration. During these periods of commitment, the fire station will be "covered" by another unit (moved from another jurisdiction) in order to maintain response time criteria. During incidents that exceed four hours in duration, additional personnel will be hired and backfilled to staff reserve apparatus for assignment to critical coverage fire stations. Additionally, regionalized "augmented staffing" may be implemented for planned or predicted "special events" such the Pomona Fair, West Hollywood Parade, Renaissance Faire, Santa Ana Wind events, Fourth of July or expected heavy rains and flooding.

LAC has equipped all units with an Automatic Vehicle Locator (AVL) device, which allows for monitoring of each vehicle's status, (e.g., "Available," "Enroute," "On Assignment," etc.) location, and driving dynamics. The AVL system is not integrated with CAD, meaning the AVL system will not provide CAD with a recommendation as to which unit is closest to a specified location. The technology used by the AVL to determine distance is measured by "crow flight." When the unique geography throughout the County is considered, crow flight measurements may not produce the closest unit as compared to street mapping. Street mapping takes into consideration, a unit's location, and route of travel to an incident. Additionally, each agency may or may not use an AVL device, or compatible device to integrate into the various dispatch centers' CAD system.

With regard to future enhancements of the dispatch process, a significant challenge is providing the ability for each dispatch center to see the other agencies' resource availability. With that, there is existing technology that could enhance dispatch procedures, provide increased coverage, and improve response times by sending the closest available unit. Solutions for improving coverage and response times have been analyzed and researched. Implementing these solutions will require multi agency agreement and commensurate cost apportionment.

As an alternative to telephonic dispatch requests between LAC and Los Angeles City Fire Department (LFD), CAD and network systems could be technically reconfigured yet, subject matter experts doubt that an improvement to response times is cost feasible.

Ultimately, a long-term solution for improving coverage and response times would be to purchase a new CAD system, which would allow for communication with other agencies' CAD systems. LAC's existing CAD system is approximately 23 years old, and technology has dramatically improved along with the demands for data, which our current system does not easily provide. Connecting the various dispatch centers' (LAC, LFD, Verdugo, Downey, Long Beach and South Bay) CAD systems in use today are not economically feasible as LFD and Verdugo have indicated they are both in the initial stages of selecting a new CAD system.

Spending time and funds configuring the old systems would be a short-lived investment. Just as LAC is unique unto itself, no one CAD system will fit all the agencies' needs. Prior to dispatch centers purchasing a new CAD system, consideration should be given by all agencies, to a standard that identifies the ability for future CAD systems to communicate with other CAD systems.

In 2009, grant funding was identified and the Los Angeles Area Fire Chiefs Association made an attempt to connect the CAD's of the following dispatch centers: LAC, LFD, Verdugo, Downey, Long Beach, and South Bay. After the concept was developed, it was determined to be impracticable as each agency would only be able to see the other resources, and a phone call would still have to be made from the requesting agency to dispatch the resource. After this was discovered, the 2009 grant funds were used on a different project. There is no grant fund presently identified that could be used to produce CAD to CAD dispatching.

LA-RICS current model will provide a network for critical dispatch data (actuating fire stations, selective call units, and field mobile data computers) and a hybrid 700/800 MHz UHF voice radio system. The system is not being designed to support CAD to CAD data transfer as this will require significantly more bandwidth than what is planned for currently in the project. There are no other dispatch related features associated with the project.

However, in an attempt to find creative and collaborative measures and solutions to address this issue, I met with the Fire Chiefs of the Los Angeles and Glendale Fire Departments regarding dispatch practices and policies. During our meeting, we began the process of identifying subject matter experts within the communications and dispatch community and to seek other partnering agencies regarding multi agency dispatching and commonality in CAD-to-CAD processes. Tentatively, we plan to produce a standard specification for an updated regional dispatch system that embraces CAD-to-CAD technology and practices. Our collective anticipated timelines forecast that a request for proposal (RFP) could be completed by the summer of 2013 with implementation to begin (after the completion of the bid process)

during Fiscal Year 2014/15 (all participating departments will be responsible for seeking their own funding sources). Realistically, I will be able to provide a more in-depth and detailed plan by June 30, 2013.

DLO:ah

c: William T Fujioka
Brence Culp
Georgia Mattera
Sergio Vasquez
Michelle Cervera
Randi Tahara
Joseph Charney
Susan Nissman
Rick Velasquez
Sussy Nemer
Sachi A. Hamai